Paper/Work
LLNL Postdoc Association Newsletter
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Musical Interest Group Takes on Legs at the Lab

New special interest group supports aspiring lab musicians

By Tyler Ralston. Are you having trouble finding musicians with the same work/life time constraints as you? Looking for a place to play your music without bothering neighbors? Need advice from others with experience in audio engineering or recording? Like you, a few LLNL staff (Tyler Ralston, Justin Galbraith, and Clint Worland) asked these very questions. Fortunately, there was a solution right here at the lab through the Livermore Laboratory Employee Services Association (LLESA) office for networking groups.

Now, through the LLESA office, a musical interests networking group (MING) has sprung up to support aspiring lab musicians. Since the MING was officially sanctioned in April this year (2011), 60 lab employees have joined the networking group. Furthermore, MING members have not only formed bands (sub-groups), but also played at lab events, including the Farmer's markets and summer picnics (Engineering and DTED). Sub-groups of various genres, including jazz, classical, rock, and acoustic, currently practice in space provided for MING at LLNL. Beyond performance driven activities, musicians discuss and collaborate on topics such as recording (equipment and software), score notation, effects processing, and instrument versatility. Even non-musicians share in musical tastes and current events (Symphonic, Orchestral, Choral, Pop/Rock, etc.) by helping to track local recitals, professional performances, and sponsored events.

Upcoming events include a general meeting and an all-out blues jam extravaganza on Nov. 15, a Battle of the LLNL Bands, and a Karaoke outing. Suggested events are also welcomed. To find out more about current events and activities, send "subscribe music-list" in the body of an email to majordomo@lists.llnl.gov to be added to the email list and/or join the LabBook MING page at https://labbook.llnl.gov/pg/groups/7896/musical-interests-networking-group/. Meet people with a similar passion for music. Don't hesitate to get in touch with your musical peers. All musical backgrounds are welcome.

Have questions about joining or booking musicians? Contact Tyler Ralston at tralston@llnl.gov.
Next meeting: November 15th, 5:15 PM, T4675, Door E.

Job Resources

careers.llnl.gov Official LLNL jobs site.

Psi-K Network www.psi-k.org
Electronic structure theory news, events, jobs

brightrecruits.com

A range of opportunities in physics & engineering.

APS Careers in Physics www.aps.org/careers
Gateway to physics jobs and careers.

Naturejobs www.nature.com/naturejobs
Hot jobs & career guidance for scientists since 1999.

Science Careers sciencecareers.sciencemag.org
Jobs & advice from the journal Science and the American Association for the Advancement of Science.

www.postdocjobs.com
Hundreds of listings for postdocs, research associates, and other jobs that require a doctoral degree.

Academic Keys www.academickeys.com
Jobs such as professor & university research scientist.

Professional & Career Development

Rookie Review: *What the novice peer reviewer needs to know before combing through a submission.*

As we move through our postdocs and grow our publication records it becomes more likely that we get asked to referee papers. NatureJobs has put together a helpful guide on how to be an effective referee, something that is likely to be of interest for many postdocs in many fields!

Helpful questions to ask when reviewing a paper:
Is this an innovative approach? How do the findings relate to other advances in the field? Are the methods appropriate to the scientific question being addressed? Does the paper adequately cite all the relevant literature? Are the data valid and do they support the conclusions?

— *Read the full article on NatureJobs*
www.nature.com/naturejobs/2011/111013/full/nj7368-275a.html

Next Steps: Interviews with Former Postdocs

Heather Kulik transitioned to an academic postdoc at Stanford University.

Where do you work now, what is your job title and how long have you been at your current position?
I work in the chemistry department at Stanford in the group of Todd Martinez as a postdoctoral scholar and have been here for about one year now.

What did you enjoy most and least about being a postdoc at LLNL?
What I liked most - At LLNL (my research is computational), I really liked having access to so many computational resources. I also had a chance to be a mentor to a graduate student while I was at LLNL as part of a summer program, and that was definitely one of the highlights. In general, it is probably a little bit easier to get face time with people at LLNL vs. in academic settings too. A lot of the support staff were really friendly at LLNL - especially the shuttle drivers!

What I liked least - As a postdoc, it was hard to do some things that would go along very naturally within an academic setting. I am a US citizen, but I remember there were issues with others not being able to get to see all the seminars that they wanted to because of building restrictions. I remember asking why we couldn't get copies of slides and the audio from each presentation, and I was told this would be too difficult/costly/was unreasonable. This is just one example of some of the constraints that make sense for a national lab but maybe make it a little harder to enjoy doing research as a postdoc.

How is your current work similar or different to your work as a postdoc?
Well, I am still a postdoc, as before, so my work is pretty similar. I'd say I definitely work much longer hours, but that is probably by choice! I think I have forged more collaborations since moving to Stanford, but that might not necessarily be because of the move.

How did you choose your institution?
I had seriously considered staying but wasn't sure if I wanted to try to continue my career at Livermore. I knew that if I switched back to academia, it had to be in a group that I thought was really stellar and did science I was very interested in. There were only two or three groups that fit that description in the Bay area and I ended up at one of them.

Can you describe the application and interview process at your institution?
Since I was applying for a postdoc, I interviewed and emailed a few academic labs in the bay area rather informally. If you'd like to make the switch back from the national lab to academia, you'll most likely have to make a case for your odd choice to the PIs that you talk to. If you're not in certain subfields, the PIs you talk to may be less familiar with the work you are doing at a national lab. In my case, I really wanted to still build my skill set in areas that I knew were not of central focus in the lab and so I needed to go to an academic setting to do this.

Did You Know…?

LLNL postdocs live all over the Bay Area, but most live in the Tri-Valley and Berkeley/Oakland areas.

Postdoc Home City	%
Tri-Valley (Livermore, Pleasanton, Dublin)	60.
(Berkeley/Oakland	22.
Other East Bay	6.4
San Francisco or Peninsula	3.9
Central Valley	2.5
San Jose, other South Bay	1.5

Upcoming Events

High Energy Density Science Seminar Series
Thursday, October 27, 1 PM. B481 Auditorium. Refreshments.
"Channeling of Relativistic Laser Pulses, Surface waves and Electron Acceleration," W. Rozmus, U of Alberta, Canada

Livermore Corn Maze — *Postdoc Social Event*
Thursday 10/27 (2 days before Halloween!) 5:30 – 7 PM
487 East Airway, Livermore www.gmfarms.com

Physics & Life Sciences Postdoc Research Seminar
Tuesday, November 1, 2011, 11 AM. Refreshments.
11 AM, B151 R1209 (Stevenson Room)
"R&D toward Detection of Coherent Neutrino Scattering at a Nuclear Reactor," Samuele Sangiorgio (Physics)
"Structure and reactivity of semiconductor electrodes for photoelectrochemical hydrogen production from sunlight and water," Brandon Wood (CMMD)

Bay Area Science Pub Crawl (San Francisco)
Friday November 4, 6-9:30 PM
www.bayareascience.org/11/04/science-pub-crawl/

Annual REI - Ridge Trail Service Day
Saturday November 5. www.ridgetrail.org
LLNL Team organized by Patrick Beck,beck30@llnl.gov

PhD Comics Movie
Tuesday November 8, 4 PM. B123 Auditorium

Musical Interest Networking Group
Tuesday November 15, 5:15 – 6 PM, T4675

Postdocs Met for Lunch at Lanna Thai on October 13

We had 14 PDs in attendance! The food was tasty and the conversation was fun. Thanks to Reggie Drachenberg, John Densmore, Claire Phillips, Paul Martinez, David Martinez, Nick Be, Andre Schleife, Eric Wang, Liam Stanton, Abhinav Bhatele, Ian Ellis, Kate Heckman, Suzanne Singer, and Nathan Kugland for participating.

Watch for our next lunch to be scheduled during the week of November 8th. See you there!

Comments/Suggestions/Complaints? Your Participation is Welcome!

Is there something that this newsletter could do better? Do you observe something around the Lab that could be better? What do *you* want from your Postdoc Association? Let us know! Contact Nathan (kugland1@llnl.gov). We'll do our best to incorporate your advice or pass it along to the relevant decision makers.

Selected Recent Research Publications by LLNL Postdocs

Bold = LLNL Postdoc. We have received many contributions and will steadily publish them all over the next several newsletters. Broadcast your achievements here! Make new connections & help us see well we are doing collectively. **Guidelines**: 1) Peer-reviewed publications only, no manuscripts in progress; 2) Your affiliation must be LLNL; 3) Note which authors are LLNL postdocs, and in what division & group; 4) Send the full citation including title to Cedric (rochaleao1@llnl.gov).

Biosciences and Biotechnology: **Lacayo, C.I.**, Malkin, A., Holman H-Y.N., Chen, L., Ding, S-Y., Hwang M.S. and Thelen, M.P. Imaging Cell Wall Architecture in Single Zinnia elegans Tracheary Elements.
Plant Physiology. 154:121-133. 2010. (Featured in the journal cover).

Chemical Sciences: **Z. Seeley**, J. Kuntz, N. Cherepy, S. Payne,
Transparent Lu2O3:Eu ceramics by sinter and HIP optimization, Optical Materials 33 (2011) 1721.

PLS Condensed Matter and Materials Division: **D. E. Fratanduono**, J. H. Eggert, T. R. Boehly, M. A. Barrios, D. D. Meyerhofer, B. J. Jensen and G. W. Collins. "Index of Refraction of Shock-Released Materials",
J. Appl. Phys., 110, 083509,(2011).

Physics Division, Optical Sciences Group: **Ammons, S.M.**; Rosario, D.; Koo, D.; Dutton, A.; Melbourne, J.; Max, C.; Mozena, M.; Kocevski, D.; McGrath, E.; Bouwens, R.; and Magee, D.,
"AGN Unification at z ~ 1: u - R Colors and Gradients in X-ray AGN Hosts," Astrophysical Journal, 740, 3. 2011

Physics Division, X-ray Science and Technology Group: P. Heimann, O. Krupin, W. F. Schlotter, J. Turner, J. Krzywinski, F. Sorgenfrei, M. Messerschmidt, D. Bernstein, M. Holmes, N. Kelez, D. Nordlund, **M. Fernandez-Perea**, R. Soufli, W. Wurth, M. Rowen, "Linac Coherent Light Source Soft X-ray Materials Science Optical Design and Monochromator Commissioning", Review of Scientific Instruments 82, 093104-1-8 (2011).

National Ignition Facility Plasma Physics Group: **A. L. Kritcher**, T. Doeppner, C. Fortmann, T. Ma, O. L. Landen, R. Wallace, and S. H. Glenzer, "In-Flight Measurements of Capsule Shell Adiabats in Laser-Driven Implosions,"
Phys. Rev. Lett., 107, 015002 (2011).

National Ignition Facility Plasma Physics Group: **Ross, J. S**, Glenzer, S. H, Palastro, J. P, Pollock, B. B, Price, D, Tynan, G. R, Froula, D. H. "Thomson scattering measurements in the collective and non-collective regimes in laser produced plasma" (Invited)Rev Sci Instrum 81, 10D523 (2010).

CASC and a member of the ROSE team: **Peter Pirkelbauer**, Damian Dechev, and Bjarne Stroustrup, "Support for the evolution of C++ generic functions," Proceedings of the Third international conference on Software Language Engineering (SLE'10), 2011, ISBN 978-3-642-19439-9, Springer-Verlag, 2011, pp 123—142.

PLS Chemical Sciences: **S.M. Sarathy**, C. Yeung, C.K. Westbrook, W.J. Pitz, M. Mehl, M.J. Thomson,
"An experimental and kinetic modeling study of n-octane and 2-methylheptane
in an opposed flow diffusion flame." Combustion and Flame, 2011, Vol. 158, 1277-1287.

PLS Condensed Matter and Materials Division: **S. Queyreau**, M. Gilbert, J. Marian, B.D. Wirth, "Edge mobilities in bcc Iron obtained by molecular dynamics". Phys. Rev. B 84, 064106 (2011),

PLS Physics/Experimental Nuclear Physics: **S. L. Nelson**, L. A. Bernstein, D. L. Bleuel, C. J. Cerjan, K. J. Moody, D. H. G. Schneider, D. A. Shaughnessy, and W. Stoeffl, "RAGS: The Gaseous Sample Collection Diagnostic at the National Ignition Facility," IEEE Trans. Plas. Sci. 39, 8, 1750, (2011).

Selected Recent Research Publications by LLNL Postdocs, Continued

PLS Biosciences, Biotechnology: **Wong, SE** and Lightstone, FC. "Accounting for water molecules in drug design." Expert Opinion in Drug Discovery, 2011, vol 6, issue 1, pp. 65-74

National Security Engineering Division SIAS: **P. Kidwell**, G. Lebanon, and K. Collins-Thompson. "A Statistical Analysis of Readability and Word Acquisition." Journal of the American Statistical Association, Volume 106, Issue 493, 2011.

Engineering Technologies: **Hopkins, J.B.**, Culpepper, M.L., "Synthesis of Precision Serial Flexure Systems Using Freedom and Constraint Topologies (FACT)," Precision Engineering, 35(4): pp. 638-649. 2011,

Meet the Postdoc Association Leadership Council

President Lance Simms works on satellite detectors

As president of the LLPA, my primary goal is to make all your wildest dreams come true. Well, not exactly, but hopefully some of you will get that movie reference. What I do plan to do is carry out and uphold the mission of the LLPA, which is to foster a sense of community among the postdoc research staff, advocate for and be the representative of the postdoc community, and act as a source of information on issues that concern postdocs. While I'm no Bill Clinton or Charlton Heston, I do have some leadership experience. I was president of the astronomical society at Stanford, where I went to grad school and got my degree in applied physics with an emphasis in astronomical detectors for optical and infrared wavelengths. Now I work on two satellite missions. The first is a space surveillance application where we're launching "space traffic cams' to prevent collisions in low and near earth orbit. The second is an attempt to map the cosmic x-ray background of the universe with a novel x-ray detector. I am incredibly grateful to be working at LLNL where I have the opportunity to work on cool projects like these.

LLNL Postdoc Association Leadership Council

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